

macerated, however. The intestine was 180 mm. long while the cæca were 36 and 28 mm. respectively. The cæca are thus relatively very long, much longer than in the species of Trogon and Pharomacrus examined by Garrod.

FURTHER NOTES AND OBSERVATIONS ON THE
BIRDS OF HATLEY, STANSTEAD COUNTY,
QUEBEC, 1916-1917.

BY H. MOUSLEY.

IN 'The Auk' for 1916, Vol. XXXIII, pp. 57-73, 168-186; will be found my first account of the birds of this district covering a period of five years (1911-1915) and embracing 122 different species. Since that account was written a further 41 have been added to the list, and in this paper I propose to deal with these new species in the same way as previously, carrying on the numbering also from where it left off. Before proceeding with these however, I would like to make a few remarks on the seasons of 1916 and 1917, and the increase or otherwise of certain interesting birds, as well as to mention the fact that the breeding list has been increased from 63 to 77 species, the fourteen new ones whose nests, eggs or young had not been previously taken being, Marsh Hawk, Red-shouldered Hawk, Sparrow Hawk, Long-eared Owl, Belted Kingfisher, Red-headed Woodpecker, Meadowlark, Pine Siskin, Scarlet Tanager, Nashville, Black-throated Blue, Blackburnian, and Black-throated Green Warblers, as well as the Water-Thrush. Of the two aforementioned seasons probably 1917 was the coldest, wettest and most backward of the two, and many species, especially the warblers, were held up on migration, and were from ten days to a fortnight behind time. Ruffed Grouse suffered severely, most of the chicks being lost in both seasons from exposure to the wet and cold, and these birds in my opinion badly need a three years close season, not only here but in many other parts of the country, to recuperate.

In contrast to the lateness of the warblers in arriving many of the earlier species were well on time, and I obtained my earliest records so far for several species, the most notable being amongst the Blackbirds and Sparrows, the latter family also being especially numerous, in fact, 1917 might be called a White-crowned Sparrow year judging from my own experience, and that of some of my friends, of the increase in the numbers of this otherwise somewhat rare migrant. Looking back over the past seven years, I have no hesitation in saying that the following birds are gradually increasing and spreading over this district, viz., Bronzed Grackle, Cedar Waxwing, Prairie Horned Lark, Meadowlark, Migrant Shrike, Purple Finch, and Chestnut-sided Warbler, and I hope like other parts of the Province of Quebec (where it is said to be much on the increase of late) we may yet get the Killdeer Plover, for I saw three of these birds during March and April of the present year 1917, the only other previous record being one on July 31, 1915.

Bronzed Grackles first invaded the village of Hatley in 1916, and nested in some of the firs and pines. Cedar Waxwings were unusually abundant in 1916, and I had no difficulty in locating about a dozen nests, as against a total of only one or two for each of the previous four years. On September 18, 1916, I saw the largest flock of this species noted so far, which consisted of fifty birds. Migrant Shrikes are certainly most interesting birds, and I have found more nests during the past two years than all the previous five put together. The favorite site here is certainly an apple tree, for out of ten nests located, seven have been in these trees at an average height of ten feet, whilst the remaining three have been in firs, one at the record height of thirty-four feet above the ground, (see *Auk*, Vol. XXXV, 1918, pp. 33-36), the other two being ten and eighteen feet. Purple Finches were a feature of 1916, and I saw birds in my garden all through the months of April to October. Prairie Horned Larks were first seen in 1917 on March 2, my earliest date so far, but only one nest was located in the two years with the characteristic paving as described in 'The Auk,' Vol. XXXIII, 1916, pp. 281-286, and Vol. XXXIV, 1917, p. 388.

As an offset to the above increase may be mentioned the 'status quo,' if not actual decrease in the case of the two latter, of such interesting species as the Indigo Bunting, Rose-breasted Grosbeak,

Catbird and Black-billed Cuckoo, and in this category not unfortunately but most fortunately may be included the Cowbird, as the only other victim besides the Red-eyed Vireo and Yellow Warbler mentioned in my previous notes, is that of a Junco who was seen feeding a young Cowbird just able to fly on June 24, 1916. Of the Indigo Bunting only one pair was seen on the roadside half way between Hatley and Coaticook on June 4 of the present year 1917, and of the Rose-breasted Grosbeak none were observed in 1916, and only one male and female in May, 1917. As regards the Catbird and Black-billed Cuckoo they were never by any means plentiful, but during the past two years their numbers seem to have dwindled to almost the vanishing point. Of the former only one nest has been located in the past two years and very few birds observed at any time, whilst of the latter, none were seen in 1916, and only one in 1917 on May 28, and no nests were found in either year. The number of Downy and Hairy Woodpeckers is not at all satisfactory, and it is becoming quite an event to see one of the latter, and ever since 1912 (when they were so abundant) Vireos have been falling off in numbers, so much so that I have not found a single nest of the Warbling since, and only a very few of the Red-eyed, which latter in 1912 were found all over the place, sometimes three and four a day. Swamp Sparrows apparently since 1913 have also been getting less and I rarely come across more than one or two nests a season now. Concerning my favorites, the Sandpipers and Warblers, I regret to say that owing to the temporary raising of the outlet of the dam at the head of 'the marsh,' in 1916, I saw very few of the Limicolæ, as the increased depth of the water submerged most of the mud banks, and only such species as the Greater Yellow-legs were able to use them, a party of seven (the largest so far) being seen on August 29. Two examples of Wilson's Snipe were noted on May 4, of the same year, thus giving me my first spring record for this species. Early in May, 1917, I changed my residence temporarily for one some three miles further north and remained there until the end of the year, only visiting 'the marsh' on a few occasions. On one of these however (September 24), I was fortunate enough to add two new species to my list, securing an example of the American Pipit and Little Green Heron, the latter being an especial good find for these parts. But

what I missed in the Sandpipers by my change of residence, I more than made up for in the Warblers, as my new hunting grounds furnished me with two examples of the Tennessee, as well as a nest and set of eggs of the Nashville and Blackburnian, the first two birds being new to my list. An account of these will be found in the annotated notes. As regards the nest of the Blackburnian Warbler (the only one of the thirteen summer visitants remaining so far unfound, see 'The Auk,' Vol. XXXIV, 1917, p. 190). I was fortunate enough on June 8, to notice the female with building material in her beak, fly direct to the site, which was a fir tree on the outskirts of a small wood. At this date building operations had only just commenced, and it was not until June 19, that the nest held the full complement (usually four, sometimes five) of four eggs, which, by the way, were the most brittle I have ever handled, one collapsing as it was being lifted out of the nest, whilst two of the remaining three could not be drilled with a true round hole, the drill sinking into the shell immediately a little pressure was applied, and thus causing a somewhat jagged edge. The ground color is quite distinctive being of a bluish tint with somewhat bold blotches of rufous brown round the larger end, the average size of the set being $.70 \times .49$.

The nest (which was presented in situ to the Victoria Memorial Museum at Ottawa) was thirteen feet above the ground and placed on a horizontal branch thirteen inches out from the trunk, and twenty-one from the tip of the branch, and was composed outwardly of small fir twigs woven together and held by spider's silk, the lining consisting of fine dry grasses, some usnea lichen, and a few fine rootlets, the dimensions being, outside diameter $3\frac{1}{4}$, inside $1\frac{3}{4}$ inches. Outside depth 2, inside $1\frac{1}{2}$ inches. As regards the male I do not think he does any building at all, as I never once saw him at the nest, nor did he appear to accompany the female as was the case with the Nashville, but I could generally hear him some little distance off singing in the tree tops.

Besides this I saw many Cape May Warblers in full breeding plumage, a little tamarack tree on one occasion holding no less than five males and one female, and later on in October, I obtained my first fall record for the Yellow Palm Warbler and Woodcock. Of the former I had only seen a very few examples in the spring, and

of the latter only one other bird, which with the present one makes two in seven years, so that the sport of woodcock shooting round Hatley cannot be said to be fast and furious. The Blackpoll Warbler was also a new and interesting addition to my list, but this was found at Ayers Cliff, some few miles away, and is dealt with fully elsewhere.

Other interesting items include a nest and set of eggs of the Marsh Hawk and Meadowlark besides the taking of a small series of Dr. Townsend's new subspecies, the Labrador Chickadee (*Penthestes hudsonicus nigricans*), in May and early September, some of which were given to Dr. Townsend and the rest to the Victoria Memorial Museum at Ottawa, these examples being the first Canadian ones to be presented to that institution.

Whilst working over this new ground (which in general was of a more swampy nature than the other) I also had the pleasure of finding the pitcher plant in bloom, as well as six new orchids, of which Hatley now possesses thirteen species to my knowledge.

The nest of the Red-headed Woodpecker was likewise in this locality, but is dealt with in the following annotated list, in which the name of Mr. W. E. Greer also appears not only in connection with this bird, but with several others as well. Mr. Greer, besides being Secretary-Treasurer of the Township of Hatley, farms about 150 acres of land at Hatley Centre, and is a taxidermist of some ability as well, and at one time possessed a fine collection of about one hundred birds of his own mounting, representing nearly eighty local species. This collection was unfortunately destroyed in a disastrous fire in 1909 that burnt Mr. Greer out of house and home, besides destroying all his records. The house was rebuilt and the collection is also in the slow process of being reformed. In his connection as a taxidermist many rare birds were brought to him to be mounted, which had either been shot in the district, or caught in traps set for muskrats or other small mammals. He thus gained a more intimate knowledge of the ducks, hawks and owls of the district than I have been able to do, and I am much indebted to him for valuable help with regard to these species, as will be seen in the list that now follows, of the forty-one new species added since 1915.

123. **Podilymbus podiceps** (Linnæus). **PIED-BILLED GREBE**.—Not uncommon fall migrant. So far I have not come across any of these birds, but Mr. Greer tells me he has seen them occasionally but has never mounted any. Mr. Stephen Clarke of Hatley Centre however, informs me that he has shot a few on Lake Massawippi, usually in the month of September, and on one occasion when fishing in the company of Mr. Fleming of New York, he obtained three at one shot. On this gentleman relating the incident to some of his friends the story was put down as "another of those fishing yarns" from the fact that these birds in company with Loons are generally looked upon (to a large extent erroneously) as being almost unshootable, from their habit of rapidly diving at the flash or report of a gun, hence the local names of devil diver or hell diver which this species enjoys.

124. **Gavia immer** (Brünnich). **LOON**.—Fairly common fall transient. My authority for including this species in my list rested at first on two mounted examples belonging to Mr. A. Murray of Ferncliff, Massawippi, one of which was shot on Lake Massawippi about twenty years ago, whilst the other was taken about the same time entangled in some fishing tackle. Mr. Greer however, informs me that he generally gets a few to mount most years, but never in the spring, only fall birds, and these, with only one exception, immatures.

125. **Uria lomvia lomvia** (Linnæus). **BRÜNNICH'S MURRE**.—Rare transient. Probably this bird is more of an accidental transient than anything else, being blown inland by easterly gales, one of which had been raging just previous to two examples being obtained on the river Massawippi, just below the village of North Hatley, on December 10, 1917. One of these two was shot by Mr. J. Robert of North Hatley and weighed 1 lb., 2 oz., the other by Mr. Alec McKay of Hatley Centre, which bird weighed 2 lbs. 1 oz. Both were in the hands of Mr. Greer (when I saw them on December 12) and were still in the flesh, waiting to be skinned and mounted for their respective captors. The great difference in the above weights would no doubt be accounted for, by one being practically an adult, the other an immature. Mr. J. E. Harting in his 'Handbook of British Birds' 1901, p. 470, gives the weight of *lomvia* as 2 lbs., 10 oz., and that of *troile* as 2 lbs. 5 oz., whilst Mr. Thos. H. Nelson in his 'The Birds of Yorkshire,' 1907, p. 721, gives the average weight of the latter as 2 lbs.

126. **Rissa tridactyla tridactyla** (Linnæus). **KITTIWAKE**.—Rare and accidental transient. My authority for including this species in my list rests on a single immature example which Mr. Greer mounted for Mr. Clarence W. Clarke of Nepperhan Heights, Yonkers, N. Y., who on August 17, 1912, whilst staying at North Hatley, captured the bird on Lake Massawippi under somewhat peculiar circumstances, as will be seen from the following extract of a letter dated October 30, 1917, which Mr. Clarke wrote me on the subject. He says, "I was angling for bass, using live minnows for bait, without any sinker, the minnows swimming near the surface, when I noticed a lone bird circling around the boat. I had about

seventy-five feet of line out, when it suddenly made a dive and flew off with the minnow carrying the entire line out of the water. This operation was repeated with two other minnows. I finally changed my bass hook for a small minnow or bait hook, and on the fourth try I hooked the bird and reeled it into the boat where it fought and struggled hard to get away, but it was well hooked. I put it in my bait can and took it alive to the taxidermist, and it now occupies a place over my mantelpiece at Yonkers. It was a very interesting and unusual catch, and few of my friends would believe that I captured the bird on a fish hook, setting it down for simply another one of those fish stories."

127. **Larus argentatus** (Pontoppidan). HERRING GULL.—Not uncommon fall transient. Mr. Greer tells me this gull is fairly common in the fall on Lake Massawippi, and he has mounted several examples for various people. Mr. W. Bassett of North Hatley has one which he tells me he shot at North Hatley in November, 1911 or 1912.

128. **Mergus americanus** (Cassin). AMERICAN MERGANSER.—Not uncommon transient. October 11, December 6. On the above date in October, 1916, a head and neck only of a female merganser was given to me, the bird having been shot on the same day on the river Coaticook near Compton about seven miles from Hatley. On measuring the distance from the nostril to the end of the bill I found it to be 1.30 inches, and from the rear of the nostril to the lore feathers .55 of an inch, thus proving it to be one of the above species and not a Red-breasted Merganser. Mr. Greer has a mounted head and neck of a male in his collection which was shot on Lake Massawippi, and on December 6, 1917, I saw a small flock of seven on this same lake, one of which, a female, was shot a few days after, and shown to me by Mr. Greer in the flesh on December 12. This bird weighed 3 lbs. Mr. Stephen Clarke of Hatley Centre has a female mounted example of this species, or at least one of his sons has it now, and which I saw on December 13, 1917.

129. **Mergus serrator** (Linnæus). RED-BREASTED MERGANSER.—Not common transient. December 6. This Merganser is decidedly rarer than the preceding one, Mr. Greer telling me that previous to this year, he can only call to mind having mounted two examples. On the above date in December, 1917, I saw three examples on Lake Massawippi at North Hatley, one of which, a female, was shot on the following day by Mr. V. Thomas of North Hatley, on the Massawippi River just below North Hatley, and this bird Mr. Greer showed me on December 12, just after he had mounted it. I took the measurement from the nostril to the end of the bill and found it to be practically $1\frac{3}{4}$ inches.

130. **Lophodytes cucullatus** (Linnæus). HOODED MERGANSER.—Rare transient. My authority for including this species in my list rests on a female example which Mr. Greer tells me he mounted some years ago, the exact records of which are unfortunately not to hand, but as far as he can remember, the bird was either shot or caught in a muskrat trap at Little Magog Lake.

131. *Querquedula discors* (Linnæus). BLUE-WINGED TEAL.— Rare transient. The only examples I have heard of so far are one that Mr. Greer tells me he mounted in April 1910, the bird being a female, and a few that Mr. Stephen Clarke of Hatley Centre informs me he has shot from time to time but has never had mounted.

132. *Aix sponsa* (Linnæus). WOOD DUCK.— Rare transient. I have not come across this handsomest of ducks so far in life, but Mr. Greer tells me he has mounted three male examples, one for Mr. S. J. Clarke of Hatley Centre, which was caught in a muskrat trap on Little Magog Lake in the middle of April about eight years ago, another for Mr. D. C. Bell of North Hatley, which was shot also on Little Magog Lake on April 26, 1910, and the third for Mr. S. A. Ball also of North Hatley which was shot on the Magog River somewhere about the year 1908. The first two examples were shown to me on December 6, 1917, and at that time were still in the possession of their respective captors. It is probably only a matter of time before this beautiful duck will have to be numbered amongst the extinct species.

133. *Clangula clangula americana* (Bonaparte). AMERICAN GOLDEN-EYE.— Rare transient. My authority for including this species in my list rests on an example which Mr. Greer tells me he mounted for Mr. R. G. Spriggins of North Hatley on December 5, 1909. The bird which is an adult male was shot by Mr. Spriggins along the eastern shore of Lake Massawippi, and when I saw it on December 6, 1917, was still in the possession of the captor.

134. *Oidemia americana* (Swainson). AMERICAN SCOTER.— Rare transient. My authority for including this species in my list rests on an adult male, which Mr. W. Bassett of North Hatley tells me he found dead on the ice on Lake Massawippi about December 6, 1915. Mr. Bassett had noticed the bird about for several days previously, on an open drain near the shore of the lake and had made up his mind to secure it, but on arrival at the spot about the above date he noticed the bird some distance out on the ice of the lake. For the purpose of heading it inland he made a detour on the ice, but on gradually drawing closer and closer he was surprised to find it did not move, and on eventually reaching the bird it was found to be dead. He kept it for several days and eventually sent it to Mr. Greer on December 13 who informs me that it was too far gone to preserve, but he confirms the record as being an adult male of the above species.

135. *Butorides virescens virescens* (Linnæus). LITTLE GREEN HERON.— Rare transient; September 24. The above date in 1917 is the only one on which I have come across this handsome little heron, which in company with another was feeding in the center of "the marsh." Both birds got up when I was a long way off and not being familiar with the species at the time, I was unable to make out what they were. One made for some adjacent woods whilst the other directed its course to a neighboring small marsh and sheet of water, which my son and I call the "Smiling Pool." I followed the latter backwards and forwards from this pool

to "the marsh" for two and one half hours, before I was able to secure it at last at the former place. The bird was sent in the flesh and presented to the Victoria Memorial Museum at Ottawa.

136. *Nycticorax nycticorax nævius* (Bodd.). BLACK-CROWNED NIGHT HERON.—Rare transient. I am indebted to Mr. Stephen Clarke of Hatley Centre for first being able to include the above species in my list. The record rests on a mounted example in the possession of Mr. Clarke, which he shot on or about April 15, 1908, at Fitch Bay some twelve miles from Hatley, and when shown to me on November 5, 1917, proved to be an adult bird. When obtained it had three occipital plumes but one of these has since been accidentally pulled out. Mr. Greer also tells me he set up one of these birds for the late Mr. Hollis J. Hitchcock of Massawippi about 1907 or 1908, which was caught in a muskrat trap at Lake Massawippi.

Since writing the above I have had an opportunity of more carefully examining Mr. Clarke's bird, and find that the three occipital plumes are still there, one plume having at some time so perfectly overlapped one of the others, as to give the bird the appearance of only having two, and thus causing Mr. Clarke to think that one had been abstracted.

137. *Cathartes aura septentrionalis* (Wied). TURKEY VULTURE.—Rare transient from the South. July 31. On the above date in 1917 whilst driving from Hatley to Massawippi, a bird of this species flew off the road and alighted on the fence alongside. My youngest son who was with me at the time, was the first to notice it, exclaiming "why there is a white headed crow or something!" I looked up just in time to catch sight of the bird as it left the fence and alighted on the ground not far from the road, and at the edge of a large wood. I got down and followed the bird about the wood for some time, flushing it out on one occasion quite close to my son who was standing in the road holding the horse, when he got a good view of it, telling me afterwards that it looked like a young turkey. The bird was evidently an immature as it only took short flights about the wood, and I got several good views of it, as it sat perched in the trees, the grayish down on its bare head, no doubt causing the allusion at the moment to the "white-headed crow or something!" of my son. I visited the spot again the following day but nothing more was seen of it.

138. *Falco sparverius sparverius* (Linnæus). SPARROW HAWK.—Rare summer visitant. June 15, 30; July 8. The earliest of the above dates in June, 1916, was the first occasion on which I had observed this handsome little hawk. The bird was quite close to me so that identification was an easy matter. On the latter date in June I saw another, and one again on July 8. Of course it is possible that these three examples may have been one and the same bird, the dates certainly suggesting that on occasions it may be a rare breeder in the neighborhood, in seeming confirmation of which Mr. Greer tells me that he saw an adult bird with young near Waterville in the summer of 1917.

139. *Asio wilsonianus* (Lesson). LONG-EARED OWL.—Rare resident.

Mr. Greer tells me that a pair of these owls have nested in his cedar swamp at Hatley Centre for at least four years if not longer, and that three or four examples have passed through his hands to mount during the past eight years, besides one which he has in his own collection.

140. ***Asio flammeus*** (Pontoppidan). SHORT-EARED OWL.—Rare transient. Mr. Greer tells me that he has only had one of these owls brought to him to mount by Mr. Oral Bean of North Hatley. Mr. Greer found one himself lying dead on the roadside not far from his house at Hatley Centre, which had probably been killed by flying against the telephone wires.

141. ***Scotiaptex nebulosa nebulosa*** (J. R. Forster). GREAT GREY OWL.—Rare winter visitant. Mr. Greer tells me he has only mounted two examples of this large and rare owl, one for Mr. H. R. Worthen of Ayers Cliff, which bird was obtained about January 19, 1911, near Ayers Cliff, and the other for Mrs. Elmer Colt of North Hatley, this bird being shot in her sugar woods by Mr. Brissette, so she tells me, some time in March about twelve years ago, and when I saw it on December 21, 1917, it was still in her possession.

142. ***Cryptoglaux funerea richardsoni*** (Bonaparte). RICHARDSON'S OWL.—Rare transient. Mr. Greer tells me he has only mounted one example of this rare winter visitant from the north, the exact records of which were unfortunately destroyed in the fire of 1909.

143. ***Cryptoglaux acadica acadica*** (Gmelin). SAW-WHET OWL.—Not uncommon resident. I have never seen this, the smallest of our owls, in life, but on April 4, 1916, I heard sounds proceeding from a wood near my house, which might well be likened to the filing of a saw, and no doubt proceeded from one of these small owls whose nest was probably in the locality, as the sounds were heard shortly before and after the above date by one or two other people. However, on October 20, 1917, an example was given to me in the flesh which had been shot the same day in a cedar swamp about a mile north of Hatley village, and which is being mounted by Mr. Greer, who tells me that he generally gets a few every year, only later in the fall, three examples being sent in last year, and from conversations I have had with many other farmers in the district it appears this little owl is fairly well distributed.

144. ***Otus asio asio*** (Linnæus). SCREECH OWL.—Rare transient. When visiting Mr. A. Murray of Ferncliff, Massawippi, on July 27, 1917, a nicely mounted example of this little owl (in the gray phase of plumage) was shown to me, which had been shot about two years ago on Mr. Murray's estate. I have never seen the bird myself in life nor can I remember ever having heard it calling, and Mr. Greer tells me no examples have so far been brought to him to mount.

145. ***Bubo virginianus virginianus*** (Gmelin). GREAT HORNED OWL.—Rare resident. My only acquaintance with this large owl was on October 11, 1916, when an example was shown to me in the flesh, the bird having been shot in the neighborhood of Hatley. This example turned the scales at 3 lbs. 14 oz., which will help to give some idea of its size, as

compared with the little Saw-whet Owl which only weighs some few ounces. Mr. Greer informs me that he mounted two examples of this owl in the winter of 1916-17, and has seen the bird in the summer months, so that I think I am justified in calling it a resident species.

146. *Nyctea nyctea* (Linnæus). SNOWY OWL.—Rare and irregular winter visitant. In the winter of 1905-06 there was an unusual flight of these owls all over Maine and the adjacent states as recorded by the late Mr. Ora W. Knight in his 'Birds of Maine' 1908, p. 263, wherein he states that fully two hundred were killed in Maine alone. In this same year they visited Hatley, and several were obtained, one by Mr. A. E. Gage of Hatley, which bird was mounted and is now in the possession of Mr. H. F. Pope also of Hatley. It is a fine specimen and quite regularly barred. Mr. Murray of Ferncliffe, Massawippi, also showed me a mounted example, which, if I remember rightly, he said was shot in his own grounds, at all events if not, it was in the immediate neighborhood.

Mr. Greer informs me as well that he has mounted quite a number of these owls, eight or nine one winter (probably the one mentioned above), one of which was almost pure white, with only the faintest trace of dusky spots or barring.

147. *Surnia ulula caparoch* (Müller). HAWK OWL.—Rare winter visitant. Mr. Greer tells me that he had one of these owls in his collection (previous to the fire) which was shot by his brother along the eastern shore of Lake Massawippi. He has also mounted two or three other examples, one for Mr. W. Bassett of North Hatley in February, 1913, which bird was also obtained along the eastern shore of Lake Massawippi, and when I saw it on December 6, 1917, was still in the possession of the captor.

148. *Picoides arcticus* (Swainson). ARCTIC THREE-TOED WOODPECKER.—Rare fall and winter visitant. I have to thank Dr. C. L. Brown of Ayers Cliff for drawing my attention to the fact that he had seen a mounted example of a Three-toed Woodpecker (but was unable to say which kind) that had been shot in the grounds of Ferncliff, the residence of Mr. A. Murray of Massawippi. I called upon that gentleman on July 27, 1917, and was shown the bird, which turned out to be a male example of the above species, and was shot in the fall of 1915 quite close to Mr. Murray's house.

Mr. Greer of Hatley Centre also informs me that he had a male in his collection (before it was destroyed) which was shot on his own farm by his brother some years previous to the fire in 1909.

149. *Melanerpes erythrocephalus* (Linnæus). RED-HEADED WOODPECKER.—Very rare summer visitant. May 15 to August 15; eggs, June, young, July. When on July 14, 1917, I received a letter from Dr. C. L. Brown of Ayers Cliff saying that he had noticed a Red-headed Woodpecker on several occasions at a certain spot, and thought there might be a nest, as he had that day seen the bird's mate also, I marked the day as a red letter one, although I must admit I felt somewhat sceptical, as Red-headed Woodpeckers in these parts are certainly a

desideratum. However, July 16 found me at the spot indicated which was on the roadside between Massawippi and Hatley Centre, on the farm belonging to Mr. Geo. Raeburn, who informed me that he first noticed the birds about the middle of May, and that they had a nest and four young on the roadside not far off, so I went to investigate and sure enough it was not long before I caught sight of both parent birds making for a decayed maple tree close to the roadside, where the nest was found about fifteen feet above the ground. Not wishing to disturb the birds I did not climb to it then, nor have I done so since, and can therefore give no dimensions of nesting hole at present, as I am anxious to see whether the birds will return next year and occupy the old site again. I might however, casually mention that the entrance hole was not a perfect circle, being more of a heart shape from some cause or another. Five days later, or on July 21, I again visited the spot and took some photos of the nest site, with both parent birds near the hole. At first they were somewhat nervous on seeing me and kept up a great chatter before one of them ventured to the hole and fed the young. Afterwards they became accustomed to my presence (as I stayed there for about an hour during which time the parents fed the young about every quarter of an hour) and flew direct to the site without any fuss.

On the thirty-first I visited them again, the young birds being still in the nest, but pushing their heads well out whenever they heard the parent birds coming with food. It was between this date and August 4 that they left the nest, as on visiting the site on the latter date they had gone, but I saw one of the parents in a field not far off and have no doubt the young were there also, but I was unable at the time to go after them. I left Hatley shortly after and did not return until the twenty-sixth, when I again visited the site, but failed to find either the parents or young, but Mr. Raeburn has since told me that he saw them on several occasions near his house up to the fifteenth of the month, after which date they disappeared and were not seen again, so that this would account for my failing to find them on the twenty-sixth.

As regards other instances of this handsome and interesting bird having been seen in the district is one noted by Dr. Brown about three years ago at Burroughs Falls, which is not so very far from Ayers Cliff, and Mr. Greer tells me that his brother also saw one some twelve years ago or more near North Hatley. Mr. Stephen Clarke of Hatley Centre has a mounted adult bird, which he shot on his farm about ten years ago, in the month of September, and he also tells me that he had seen one other example some years previously.

150. *Antrostomus vociferus vociferus* (Wilson). WHIP-POOR-WILL. Uncommon summer visitant; May to September. To give the exact status of the Whip-poor-will at Hatley is not an easy matter owing to the secretive and nocturnal habits of the bird. Personally I have only seen one example on the evening of June 30, 1916 (when driving home from Coaticook a bird flew across the road from the outskirts of a large wood which I was enabled to identify as belonging to this species), but this may

be partly accounted for, seeing that I am a home bird and very rarely go out at night, still it cannot be plentiful or surely I should have flushed a bird or two in the daytime, during my constant field work for the past seven years. In the summer of 1917 two notices appeared in the local papers to the effect that the bird had been heard not far from Hatley on the Waterville road, and also at the head of Lake Massawippi near Ayers Cliff, and this unfortunately is the sum total of my data regarding the status of this most interesting and useful bird in the neighborhood of Hatley. Mr. Greer tells me he has never had one of them brought to him to mount, during his nineteen years residence in these parts, which is some indication that the birds are rarely obtained.

151. **Empidonax flaviventris** (Baird). YELLOW-BELLIED FLY-CATCHER.— Rare transient; June 5, 11; September 1. My first acquaintance with this interesting little Flycatcher was on the above date in September, 1916, when I obtained an example which was the only one seen that year. On June 5 of the following year I secured another and this with the one already mentioned were sent in the flesh at the time and given to the Victoria Memorial Museum at Ottawa. It is probable that this species may breed here on rare occasions for on the latter date given in June I came across two more, which gave me the impression that they were a pair and might be nesting in the locality, which was of a moist nature with mossy hummocks about and entirely suited to their requirements. However, I was unable to find the nest at the time nor did I see the birds again at subsequent visits, or any in the fall.

152. **Loxia curvirostra minor** (Brehm). AMERICAN CROSSBILL.— Irregular winter visitant, sometimes common. I have not yet had the pleasure of coming across this interesting bird so far myself, but Mr. Greer tells me that he had two mounted ones (a pair) in his collection before it was destroyed by fire, and has seen them in large flocks on several occasions, more especially during one winter when they and Pine Grosbeaks were unusually numerous.

153. **Loxia leucoptera** (Gmelin). WHITE-WINGED CROSSBILL.— Rare and irregular winter visitant; August 31, October 27. On August 31, 1916, which is an early date for this species, I saw two strange birds feeding on the seeds of a tall hemlock tree in an open space of a somewhat large wood. Of these I secured one which turned out to be a female of the above species, and was sent in the flesh and given to the Victoria Memorial Museum at Ottawa. None were seen again until October 27, when out of a flock of fifteen I secured a young male. In describing the status of the Crossbills in Maine the late Mr. Ora W. Knight in his 'Birds of Maine' 1908, p. 376, uses the following words: Eccentric; Erratic; Irregularly Sporadic; and what better could be found to sum up the wandering nature of these curious birds. Mr. W. E. Greer of Hatley Centre informs me that he has only met with this species on one occasion in the nineteen years he has resided in the district.

154. **Progne subis subis** (Linnæus). PURPLE MARTIN.— Rare tran-

sient. Mr. Greer tells me that some twelve or fifteen years ago, he had a small martin house erected on his farm at Hatley Centre one summer, in order to try and induce a few martins he had noticed the year before to remain and breed. This house, however, became tenanted by Tree Swallows before the arrival of a pair of martins, which after investigating and hanging round for a few days, during which time sundry fights for the possession of the house took place, eventually left, as the Tree Swallows could not be ejected. At intervals since then Mr. Greer has seen odd pairs now and again, and as late as 1917 a pair were seen for one day only. It is evident from the above that a few stray birds pass through this district now and again, but neither Mr. Greer or myself know of any breeding records, nor do we think it at all likely that any exist in the immediate neighborhood.

155. *Vermivora rubricapilla rubricapilla* (Wilson). NASHVILLE WARBLER.—Rare summer visitant; May 23 to September 22. Eggs, June 15. My first acquaintance with this interesting species was on August 16, 1916, when an example was obtained and sent to the Victoria Memorial Museum at Ottawa see 'The Auk,' Vol. 34, 1917, p. 214. I next saw the species on May 23 of the following year and from then to June 2 nineteen examples were noted, see 'The Auk,' Vol. 34, 1917, p. 484. Out of this number apparently only one pair remained behind to breed (as no others were seen during the summer) the female being seen with building material in her beak on June 5. It was not however, until June 15 that their nest was located at the foot of a spirea bush on a little mound, well sunk into the surrounding hair cap moss (*Polytrichum commune*) and dwarf cornel or bunchberry (*Cornus canadensis*) of which the mound was carpeted. It was entirely hidden from sight and would never have been found had I not flushed the female from her set of five eggs. The nest was composed outwardly of some moss and fine dried grasses, the lining consisting of very fine grasses, hair like rootlets and some pine needles, the dimensions being as follows, viz.: outside diameter 3, inside $1\frac{3}{4}$ inches; outside depth $1\frac{3}{4}$, inside $1\frac{1}{8}$ inches. The eggs were nicely and evenly marked and zoned at their larger ends, the average dimensions of the five being $.56 \times .46$. On several occasions when I observed the female with building material in her beak, she was accompanied by the male who always flew into a tamarack tree and commenced to sing (and I often saw him in it afterwards) and it was not far from this tree that the nest was eventually found. I am of the opinion that the male does very little if any nest building, contenting himself with following his partner about on foraging expeditions and singing the while no doubt to encourage her.

In the fall I only saw two examples, one on September 1, and the other on the 22d, but this may be partly accounted for no doubt from the fact that I was absent from Hatley between the thirteenth and twenty-fifth of August, although I am inclined to think (judging from past experience) that the number seen in the spring was abnormal and was due to an unusual wave of the species.

156. *Vermivora peregrina* (Wilson). TENNESSEE WARBLER.— Rare transient; May 26–27. For the past six years I have been anxiously looking out for this warbler without success until May 26, 1917, when three examples were observed, out of which I secured two, and presented them to the Victoria Memorial Museum at Ottawa. The following day I saw another, thus making a total of four only for the year, as none were seen in the fall. The last example was by itself, but the other three were in the company of a mixed flock of other warblers, consisting of one Seaburnian, one Bay-breasted, one Chestnut-sided, two Nashvilles and several Myrtles and Magnolias, as well as a few Ruby-crowned Kinglets.

157. *Dendroica tigrina* (Gmelin). CAPE MAY WARBLER.— Rare transient; May 22–30; August 27 to September 12. My first acquaintance with this striking and usually rare warbler was on August 28, 1916, when an example was obtained as well as another on the thirtieth, both being given to the Victoria Memorial Museum at Ottawa. Two others were seen on the former date as well as one on September 12, making a total of five for that year. In the following spring they were first seen on May 22, and from that date to the thirtieth a total of twelve were observed, three of this number being obtained and again given to the Museum at Ottawa. In the fall they were first noticed on August 27, and from that date until the first of September another seven were noted, making a total of nineteen for 1917, or twenty-four for the two years. They were never very difficult to approach and could generally be found frequenting a certain restricted area. On one occasion I obtained a snapshot of five males and one female in a little tamarack tree, this female, if I remember rightly, being one of the only three seen out of the above total of twenty-four birds. It is a curious fact (not fiction) that the last example seen of this warbler in 1916 was on September 12, and it flew out of the very same birch tree, in which a week later I found the Myrtle Warbler imbibing sap (see 'The Auk,' vol. 34, 1917, pp. 484–485) from sapsucker holes. Could it have been engaged likewise I wonder?, for I have since learned that it has been recorded as doing so on New Providence, Bahamas, see 'The Auk,' Vol. 30, 1913, p. 155.

158. *Dendroica striata* (J. R. Forster). BLACK-POLL WARBLER.— Rare transient; May 28. The only occasion on which I have come across this warbler was at Ayers Cliff,— about six miles from Hatley, on the above date in 1917, when in a small alder bush near the junction of the river Tomifoby with Lake Massawippi, an adult male was seen at close quarters for several minutes, making identification absolutely sure.

The elevation of this spot is only some 550 feet above sea level, which is a low one for migrating Black-polls in these parts I imagine, judging from Allen's 'Birds of New Hampshire,' 1903, pp. 57–58, 163–165, in which we are told that the Black-polls at all events in the central and northern parts of the state are only found migrating through the White Mountains at an elevation of 2000 to 4000 feet or more, and the same thing occurs, I believe, in the Green Mountains in Vermont. Judging then from my experience, it looks as though none of the vast multitude of Black-polls

passing through these states reach their breeding grounds in the far north by way of Hatley, unless possibly by keeping to the tops of the Bunker and Massawippi hills at an elevation of 1400 feet, which theory I am not inclined to favor at present, in the absence of any further published records of the appearance of the birds until we reach Montreal and Quebec, my friend, Mr. L. M. Terrill, informing me that he did not observe it at Bury, a village some thirty-five miles to the northeast of Hatley. What I think is far more likely to be the case, is that the birds passing through New Hampshire branch off at Lancaster or thereabouts as their most northern point, and pass up through central and eastern Maine to New Brunswick, Nova Scotia and the Gaspé Peninsula, from whence they cross to the Magdalene Islands, Anticosti and Labrador, whilst those from Vermont evidently take a westerly course probably through the northern portion of the state of New York, and thence across the St. Lawrence and through Ottawa to the north, but this line of migration is not nearly so well defined as that through Maine. Dionne speaks of it as a rare migrant in spring at Quebec, Wintle as an irregular spring migrant at Montreal, and says he has not met with it in autumn, whilst Terrill writes me that he meets with it there commonly in the fall, but irregularly in the spring. From this it looks as though the spring wave rarely reaches Quebec or Montreal, but in the fall some of the returning birds pass through these two places on their way south. This state of things seems to entirely favor my theory that Black-polls do not pass through Hatley or the eastern townships in the spring at all events, and as regards the fall when young of this species might be mistaken for young of the Bay-breasted Warbler, I have on several occasions when any doubt, existed, shot the birds, but they have always turned out to belong to the latter species. Taking Montreal and Quebec as a base line and Hatley as the apex, the territory inside this triangle is practically virgin ground, and awaits its quota of good observers to settle some of these interesting problems.

159. *Seiurus noveboracensis noveboracensis* (Gmelin). WATER-THRUSH.—Rare summer visitant, fairly common transient; May 19–28 (summer); August 26 to September 8. My first acquaintance with this species was on August 26, 1916, when one example only was seen and obtained. In the following spring two more were obtained in May and given to the Victoria Memorial Museum at Ottawa, and six others seen; (five of this latter number at Ayers Cliff) but in the fall only one was again noted the same as the previous year, thus making a total of ten examples for the two years. Mr. Greer of Hatley Centre tells me that on one occasion in summer he came across a parent bird feeding young near Massawippi Lake, and on this information I have ventured to include the bird as a summer visitant on rare occasions. It will be noticed that one half of my records were obtained at Ayers Cliff, which is in the immediate vicinity of the lake, and I quite think the species is more plentiful there owing to its damper surroundings than it is at Hatley.

160. *Anthus rubescens* (Tunstall). AMERICAN PIPIT.—Not com-

mon transient; September 22-26. On the morning of September 22, 1917, I had only crossed one field after leaving home, when I observed a strange bird on the fence rails, which I at once knew must either be a Pipit or a Wagtail from my experience of these species in the 'old country.' I secured the example and found it to be an American Pipit. At the report of the gun another fourteen got up and started to fly away, but returned almost at once on my whistling them, which enabled me to view them at close quarters. Two days later I saw another flock of eleven securing one, which with the other I presented to the Victoria Memorial Museum at Ottawa. On the last date given above I only saw one example.

161. *Troglodytes aëdon aëdon* (Vieillot). HOUSE WREN.—Rare transient; May 19; August 6 to September 22. In August of 1915 I got a fleeting glance of a wren which I took to be one of this species, but did not consider identification sufficiently good to include it in my 1911-1915 list. However in the following year from August 11-15, I got on intimate terms with one of these birds, and visited him every day between these dates. He generally commenced by scolding me well, but on two occasions ended up with a little song, but nothing I imagine to be compared with his spring achievement in this line. He also had a pretty way of basking in the sun with his breast pressed closely to the branch or log, when he would put one leg under his wing, and extend it to its fullest extent. On the above date in May, 1917, I saw just one example which I secured and gave it to the Victoria Memorial Museum at Ottawa. In the fall of the same year on August 6 and 10, I again saw an adult bird (practically in the same place each time), feed an immature well able to fly. Two other examples were seen, one on August 31, and the other on September 22. The above notes should prove interesting in view of the rareness of this wren in eastern Quebec, out of which no doubt it has been driven by the advent of the English Sparrow, the same as it was in Maine.

162. *Cistothorus stellaris* (Naumann). SHORT-BILLED MARSH WREN.—Rare transient. May 21. On the above date in 1917, I saw one of these birds near a small stream running through the center of a damp meadow much overgrown with long rank tussocky grass and some alder bushes, and although I had my gun with me at the time, I must admit I was so surprised at seeing a new wren and one decidedly rare for these parts, that I failed to fire when I had the chance, and the bird slipped away amongst the long grass, and I was unable to find it again. In spite of my inability to produce the example I give the record as I know I neither confused it with a Winter or a House Wren, both of which I am familiar with, and whilst the general ochraceous buffy appearance of the bird with its short bill was still fresh in my mind, I went directly home (as the meadow was not far off) and after looking up plate No. 102 in Eaton's 'Birds of New York' 1914, I had no misgivings in my own mind that what I had seen was one of the above species.

163. *Penthestes hudsonicus nigricans* (Chas. W. Townsend).

LABRADOR CHICKADEE.—Rare transient; May 14–30, September 3–21, (October 10 to November 12). Time was when I could not have told *nigricans* from *littoralis* in the field, but that is past history now, and probably I have had as much experience in the field with the former as any one, so that when a couple of Hudsonian Chickadees came into sight today, October 10, 1917, at close quarters, I had no difficulty in seeing that they were *littoralis* and not *nigricans*, not so much from the fact that their backs were brown instead of dusky, the caps undifferentiated, and the sides of a strong brown tint, but from their behavior and the tone of their voice, which was entirely different to that of any *nigricans* I have so far come across. The same wheezy note was certainly there but it was stronger and more insistent than in *nigricans*, which in my experience is a very feeble wheeze, and as regards their behavior they came close down to me of their own accord, and when whistled, the same as *atricapillus* will, whereas I have never been able to induce *nigricans* to do so, in fact it has always been difficult to get a shot at these latter owing to their nervous and restless state. In my 'Birds of Hatley' (Auk, Vol. XXXIII, 1916, p. 184) I record two Acadian Chickadees (*littoralis*) which from my late experience I can now assert to be correctly named, and as regards the two Hudsonian Chickadees (*Penthestes hudsonicus* subsp.?) (Auk, Vol. XXXIV, 1917, pp. 215, 217). I have no hesitation in saying they were *nigricans* but as will be seen, the dates, October 10 to November 12, have been inserted in brackets. Returning to *nigricans* I first became acquainted with the species on May 14, 1917, when two examples were secured, and sent in the flesh to Dr. Townsend for verification. Two days later another was obtained and also sent to the same authority. These three proved to be adults, two males and one female. On the twenty-first three more were obtained and one on the thirtieth, which were all sent in the flesh and given to the Victoria Memorial Museum at Ottawa (proving to be two males and two females, see 'The Auk,' Vol. 34, 1917, pp. 486–487) which institution at the time possessed only one example, and that not a Canadian taken one. No more were seen until the very early and no doubt record "fall" date of September 3, when two were obtained and sent to Dr. Townsend, but owing to a delay in the mails, they were unfortunately not in a fit state to preserve on arrival. Another male was secured on the thirteenth and again given to the Museum at Ottawa. Altogether from May 14 to September 21, sixteen examples were seen, and without exception, as already stated, they were restless and difficult to approach, especially amongst the firs which they always frequented either alone, or in the company of flocks of Golden and Ruby-crowned Kinglets, generally the former.

SYNOPSIS OF PRINCIPAL EVENTS. YEARS 1916-1917.

1916.

Pine Grosbeaks again made their appearance after an absence of three years. Evening Grosbeaks also seen. Black-throated Blue and Black-throated Green Warblers found breeding. Cedar Waxwings unusually plentiful and nesting in small communities. Goldfinches also plentiful and seen for the first time in every month of the year. Red-eyed Vireos more numerous again, than during the past three years, other vireos rare or absent.

Kingbirds very scarce. Olive-backed Thrush found breeding for the second time. Purple Finches more numerous than ever before. Sharp-shinned Hawk wintered at Hatley. Bronzed Grackles first invaded Hatley Village and nested there. Obtained a fine example of Wilson's Warbler, second one only seen in seven years. Found Myrtle and Black-throated Blue Warblers taking sap from sapsucker holes, and possibly the Cape May as well. White-winged Crossbills seen for the first time, and a female obtained on the early date of August 31. Nashville Warbler and Water-Thrush also seen for the first time. Black-capped Chickadees and White-breasted Nuthatches more plentiful than usual.

1917.

Evening and Pine Grosbeaks again present, the flocks consisting of a much larger proportion of full plumaged males than usual. Early date for arrival of Savannah Sparrow, March 30. One example of Short-billed Marsh Wren seen May 21. White-crowned Sparrow unusually numerous. Nashville and Black-burnian Warblers found breeding for the first time, also Meadowlark, Red-headed Woodpecker and Marsh Hawk, the latter on May 10, an early date for this species. Obtained first spring records for Cape May and Nashville Warblers, also Wilson's Snipe, and first fall records for Woodcock and Yellow Palm Warbler, the first being the second bird only (Woodcock) seen in seven years. Black-poll (one only) and Tennessee Warblers (four) seen for the

first time. Pair of Indigo Buntings seen on June 4, the second only in seven years. Migrant Shrikes spreading and three pairs located breeding as against one only in previous years. Late date for departure of Cedar Waxwings, October 9.

Obtained a small series of Dr. Townsend's new subspecies, the Labrador Chickadee, both in spring and fall, the early date of September 3 being no doubt a record one for the latter season. Two Acadian Chickadees seen on October 11, making four only for seven years. Northern Shrikes somewhat numerous at the end of October. One Yellow Palm Warbler seen on November 8, a late date, which remark also applies to a Crow seen on December 6. Two Brünnich's Murres shot on the Massawippi river on December 10, after an easterly gale. Months of November and December noticeable for the almost entire absence of winter birds.

For the convenience of those wishing to see at a glance, exactly what birds may be found at Hatley, I have prepared the following list, marking with an asterisk the seventy-seven species, whose nests, eggs or young have actually been found, and with a dagger the fifteen, some of which are known, and others believed to breed more or less regularly, but whose nests, eggs or young have so far escaped detection. It may also be mentioned that of this list thirteen species are Residents, seventy-four Summer Visitants, sixty-four Transient Visitants, whilst the balance or remaining twelve are Winter Visitants.

Pied-billed Grebe	Canada Goose
Loon	American Bittern*
Brünnich's Murre	Great Blue Heron
Kittiwake	Little Green Heron
Herring Gull	Black-crowned Night Heron
American Merganser	Virginia Rail
Red-breasted Merganser	Sora*
Hooded Merganser	American Woodcock
Black Duck	Wilson's Snipe
Green-winged Teal	Pectoral Sandpiper
Blue-winged Teal	Least Sandpiper
Wood Duck	Semipalmated Sandpiper
American Golden-eye	Greater Yellow-legs
American Scoter	Yellow-legs
Snow Goose	Solitary Sandpiper

Bartramian Sandpiper*	Prairie Horned Lark*
Spotted Sandpiper*	Magpie
Killdeer	Blue Jay*
Semipalmated Plover	Canada Jay
Canada Spruce Grouse†	Crow*
Canada Ruffed Grouse*	Bobolink*
Turkey Vulture	Cowbird*
Marsh Hawk*	Red-winged Blackbird*
Sharp-shinned Hawk†	Meadowlark*
Goshawk	Baltimore Oriole*
Red-tailed Hawk	Rusty Blackbird
Red-shouldered Hawk*	Bronzed Grackle*
Bald Eagle	Evening Grosbeak
Pigeon Hawk	Pine Grosbeak
Sparrow Hawk*	Purple Finch†
Osprey	English Sparrow*
Long-eared Owl*	American Crossbill
Short-eared Owl	White-winged Crossbill
Barred Owl†	Redpoll
Great Grey Owl	Goldfinch*
Richardson's Owl	Pine Siskin*
Saw-whet Owl†	Snow Bunting
Screech Owl	Vesper Sparrow*
Great Horned Owl†	Savannah Sparrow*
Snowy Owl	White-crowned Sparrow
Hawk Owl	White-throated Sparrow*
Black-billed Cuckoo*	Tree Sparrow
Belted Kingfisher*	Chipping Sparrow*
Hairy Woodpecker*	Slate-colored Junco*
Downy Woodpecker*	Song Sparrow*
Arctic Three-toed Woodpecker	Swamp Sparrow*
Yellow-bellied Sapsucker*	Fox Sparrow
Northern Pileated Woodpecker†	Rose-breasted Grosbeak*
Red-headed Woodpecker*	Indigo Bunting*
Northern Flicker*	Scarlet Tanager*
Whip-poor-will†	Purple Martin
Nighthawk	Cliff Swallow*
Chimney Swift*	Barn Swallow*
Ruby-throated Hummingbird†	Tree Swallow*
Kingbird*	Bank Swallow*
Crested Flycatcher*	Cedar Waxwing*
Phoebe*	Northern Shrike
Wood Pewee†	Migrant Shrike*
Yellow-bellied Flycatcher†	Red-eyed Vireo*
Alder Flycatcher*	Warbling Vireo*
Least Flycatcher*	Yellow-throated Vireo*

Blue-headed Vireo*	Canada Warbler*
Black and White Warbler*	Redstart*
Nashville Warbler*	American Pipit
Tennessee Warbler	Catbird*
Northern Parula Warbler*	House Wren
Cape May Warbler	Winter Wren*
Yellow Warbler*	Short-billed Marsh Wren
Black-throated Blue Warbler*	Brown Creeper†
Myrtle Warbler*	White-breasted Nuthatch†
Magnolia Warbler*	Red-breasted Nuthatch†
Chestnut-sided Warbler*	Chickadee*
Bay-breasted Warbler	Acadian Chickadee†
Black-poll Warbler	Labrador Chickadee
Blackburnian Warbler*	Golden-crowned Kinglet
Black-throated Green Warbler*	Ruby-crowned Kinglet
Pine Warbler	Veery*
Yellow Palm Warbler	Olive-backed Thrush*
Ovenbird*	Hermit Thrush*
Water-Thrush*	Robin*
Maryland Yellow-throat*	Bluebird*
Wilson's Warbler	(163 species)

HOME LIFE OF THE VESPER SPARROW AND THE HERMIT THRUSH.

BY E. M. AND W. A. PERRY.¹

ONE summer at Douglas Lake, Michigan, the Biological Station of the University of Michigan, we had an opportunity of studying the nesting habits of the Vesper Sparrow and the Hermit Thrush. The results of my observations are presented below.

I.

THE VESPER SPARROW.

One usually associates the Vesper Sparrow with large, grassy fields and dusty roadsides. The region in which I made my study

¹ Observations were made by E. M. Perry, article was prepared by W. A. Perry.